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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/674,427	10/01/2003	John David Lilley	P68217US1	5662

7590 09/27/2006

David John Lilley
29 Lexington Road
Millbury, MA 01527

EXAMINER

ALEXANDER, MICHAEL P

ART UNIT PAPER NUMBER

1742

DATE MAILED: 09/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/674,427

Applicant(s)

LILLEY, JOHN DAVID

Examiner

Michael P. Alexander

Art Unit

1742

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,5-8 and 10-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-8 and 10-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim(s) 1, 3, 5-8 and 10-17 is/are pending.

Claim Rejections - 35 USC § 112

Claims 1, 3, 5-8 and 10-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Regarding claim 1, the specification does not disclose the limitation "at least 50 wt%" iron. Claims 3, 5-8 and 10-17 are rejected in that they depend from claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3, 6-8 and 10-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Susumu (JP 2001-234292) in view of Theckston (US 4,441,318).

Claims 1, 3, 6-8 and 10-17 are rejected on the same grounds as stated in the Office Action of 17 April 2006. With respect to the amended limitation "steel" in claim 1, the Examiner asserts that the alloy of Susumu would inherently be steel. See ninth argument below in the "Response to Arguments" section. With respect to the limitation "at least 50 wt% iron" limitation in claim 1, see *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003). "A *prima facie* case of obviousness exists when the claimed range and the prior art range do not overlap but are close enough such that one skilled in the art would have expected them to have the same properties."

Response to Arguments

Applicant's arguments filed 19 July 2006 have been fully considered but they are not persuasive.

First, applicant argues that Susumu does not teach 0.2 to 0.4 wt% carbon because Susumu teaches that the carbon would be optional. In response, see *In re Peterson*, 315 F.3d 1325, 1330, 65 USPQ2d 1379, 1382-83 (Fed. Cir. 2003), in which the court held that a reference disclosing an optional rhenium content overlapping with a range of rhenium content of the claimed invention would be *prima facie* obviousness.

Second, applicant argues that Susumu would not be graphite free because Susumu does not teach the same composition as far as carbon is concerned. In response, see MPEP 2112.01 I. Where the claimed and prior art products are identical or **substantially identical** in structure or composition, or are produced by identical or

Art Unit: 1742

substantially identical processes, a prima facie case of either anticipation or obviousness has been established. In re Best, 562 F.2d 1252, 1255, 195 USPQ 430, 433 (CCPA 1977). "When the PTO shows a sound basis for believing that the products of the applicant and the prior art are the same, the applicant has the burden of showing that they are not." In re Spada, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990).

Third, applicant argues that Susumu does not teach a cast steel. In response, see MPEP 2113. The patentability of a product does not depend on its method of production.

Fourth, applicant argues that Susumu should not be considered to disclose a gas exhaust system. The Examiner agrees. However, this limitation is supplied by Theckston not Susumu. See page 4 of the office action of 17 April 2006.

Fifth, applicant argues that the claimed invention is distinguished from Susumu because Susumu teaches a super alloy having a high cobalt concentration. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "not a super alloy", "excluding a high cobalt content") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Art Unit: 1742

Sixth, applicant argues that Susumu teaches that the alloy is vacuum cast and does not teach the limitation "air melted". In response, see MPEP 2113. The patentability of a product does not depend on its method of production.

Seventh, applicant argues that the alloy of Susumu is distinguished from the claimed steel because the alloy of Susumu would have oxygen sensitivities while the claimed steel is not sensitive to oxygen. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "not sensitive to oxygen") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Eighth, applicant argues that Susumu teaches away from a nickel concentration greater than 35%. In response, the Examiner notes that the claimed range of nickel is 34 to 36 wt%, which overlaps with the disclosed range, which is prima facie evidence of obviousness. See MPEP 2144.05 I.

Ninth, applicant argues that Susumu would not be a steel because less than 50% of iron is present. The Examiner disagrees. See U.S. Pat. No. 5,882,440 as evidence that term "steel" is applied to alloy compositions having less than 50% iron.

Tenth, applicant argues that the alloy of Susumu would be distinguished from the claimed invention because Susumu teaches aluminum of between 1 and 2% and the claimed invention has a maximum of 1%. In response, the Examiner notes that the

Art Unit: 1742

overlap of the claimed range with the disclosed range, which is prima facie evidence of obviousness. See MPEP 2144.05 I.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael P. Alexander whose telephone number is 571-272-8558. The examiner can normally be reached on M-F 10:00 - 6:00.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy V. King can be reached on 571-272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1742

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



mpa


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

Notice of References Cited	Application/Control No. 10/674,427	Applicant(s)/Patent Under Reexamination LILLEY, JOHN DAVID	
	Examiner Michael P. Alexander	Art Unit 1742	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-5,882,440	03-1999	Shinosaki et al.	148/427
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
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	I	US-			
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FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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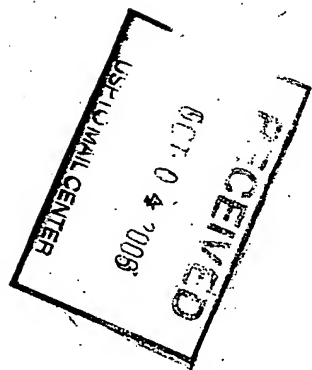
*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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